

## Terms of Reference

*Data collection for the TSA Bulgaria preschool randomized control trial: (a) 320 community listing survey, and (b) 6,000 household baseline survey.*

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### **Introduction**

As part of a randomized controlled trial (RCT) to assess the effectiveness of an early childhood development services (ECDS), combining outreach with conditional and unconditional cash transfer (CCT) for parents in segregated communities in Bulgaria wishing to send their children to preschool, the World Bank seeks to get into an agreement with an organization to collect data.

These draft terms of reference will explain the project, briefly describing the intervention and the partners of the project, the evaluation methodology, and list the data collection activities required by the data collection organization.

### **Project Rationale**

The World Bank intends to carry out an impact evaluation of a new intervention in Bulgaria called “Springboard for School Readiness”, that seeks to increase preschool participation for disadvantaged children, especially Roma. The evaluation and intervention were designed in partnership with the Trust for Social Achievement (TSA) under the America for Bulgaria Foundation and with principal investigators Professors Elise Huillery (Science Po, JPAL Affiliate) and Paul Gertler (UC Berkeley, JPAL Affiliate), and World Bank Senior Economist Joost de Laat.

The primary objective of this impact evaluation is to provide policy relevant information on how to most cost-effectively address preschool participation, promote quality early learning, and promote full inclusion in the broad sense for poor Roma children in Bulgaria. Since early learning and socialization provide a critical foundation for all children, the long term follow up envisioned under this project will also inform the policy debate on promoting cost-effective strategies for learning at the primary level and beyond.

### **Project Description**

As part of the project, the following interventions will be organized during the 2014-2015 school year by TSA in selected communities:

#### **Intervention A: Free access to pre-school education**

The intervention consists of covering the full cost of education to eligible households so as to insure that affordability is not an obstacle. The cost of education includes fees as well as other financial contributions that teachers ask parents to make for school supplies. The fees and other financial contributions to schools will be directly paid to the school by the program implementing partner (TSA).

#### **Intervention B: Free access to pre-school education + financial incentive**

This intervention offers the same as the previous one and adds a financial incentive: a monthly bonus is

offered to the family provided the child attends pre-school daily (with the exception of absences as a result of illness etc.). The amount of the financial incentive will be about half of the child allowance.

### **Intervention C: Information about the benefits of education and promoting interaction between parents and preschool officials**

The project intervention consists of engaging eligible parents in a discussion about the benefits of pre-school education, to raise awareness of the importance of pre-school education in further education and professional life of their child. This will be done by door-to-door visits by social workers.

## **Methodology**

The study will involve three randomizations to determine the treatment status of the eligible participants. First, in each of 240 eligible communities, 30 households will be designated by TSA, and each household will have one child chosen if there is more than one sibling of kindergarten age (3-5 for the 2014-2015 school year). Note that out of 30 households, only 25 will be interviewed and followed, for a total of  $240 \times 25 = 6,000$  children.

The 240 eligible communities will be identified as follows: Using a list of segregated communities previously created by OSI several years ago, a preliminary list of 320 segregated vulnerable communities is already available. OSI will collect some additional information (see below) on at least these 320 communities, which TSA/WB will use to identify a subset of 240 communities that can potentially accommodate the project. Then, a public lottery will be organized to determine the treatment status of 240 confirmed communities.

**Table 1 – Study Design**

	<b>No Financial Intervention</b>	<b>Free Pre-School Education</b>	<b>Free Pre-School Education + Financial Incentive</b>	<b>Total</b>
<b>No Information</b>	27 settlements of 25 households	27 settlements of 25 households	27 settlements of 25 households	80 settlements of 25 households
<b>50% of households receive information</b>	53 settlements of 25 households	53 settlements of 25 households	53 settlements of 25 households	160 settlements of 25 households
<b>Total</b>	80 settlements of 25 households	80 settlements of 25 households	80 settlements of 25 households	240 settlements of 25 households

## ***Data collection: Listing Exercise and Baseline***

### **Description**

There are 2 phases to these TOR. First a community listing during the Fall 2013, and then a baseline household interview during Winter/Spring 2014.

#### **1- Community Listing Survey – Fall 2013**

The first phase of the project for the survey firm is the listing of communities. The objective is to visit the approximately 320 communities and their kindergartens, and assess whether they are suitable for the study.

Specifically, OSI will:

- Visit the communities and interview leaders, draw the GIS borders of the community
- Visit the municipality offices, get official information, interview officials
- Visit the kindergartens, get GPS position, interview administrators or teachers
- Fill the questionnaires with 5 key informant interviews
- Obtain consent from the municipality authorities to see the lists of birth
- Obtain the consent from the kindergarten to use the lists of attendance in 2014-2015

The objective is to collect basic community/preschool level information that will enable the TSA/WB team to identify 240 eligible communities. Please see hereafter “Technical definition of a eligible community:” for a formal definition.

**The information to be collected from the community listing exercise is the following:**

#### **At the community level:**

- Urban/semi-urban/rural
- Municipality population size
- Settlement population size (if not number of people, at least number of households)
- Estimated number of children aged 3-5 (during the 2014-2015 school year)
- Settlement area (estimate)
- Estimated (by OSI) share of Roma
- Average distance to the kindergarten from the settlement (both in meters and in time)
- Presence of civil society organizations active on promoting preschool
- Wealth characteristics - based on the quality of housing? Other characteristics of the neighborhood like roads, sanitation, electricity, water tap?

#### **At the kindergarten level (in 2013-2014):**

- Number of teachers
- Number of classes
- Number of pupils
- Number of rooms suitable for a class
- Number of additional children 3-5 that could be accommodated with existing physical/teacher infrastructure

### Technical definition of an eligible community:

At the end of the listing exercise, 240 eligible communities must be identified by TSA/WB, and if the criteria are too stringent, the TSA-WB team will need to adjust the definition of a eligible community.

For a candidate community (~320) to become an eligible participating community (240), the following conditions have to be met:

- There must be at least 30 children from 30 different households of age 3-5 during the 2014-2015 school year
- The community must not be from dense urban areas. Exclude:
  - Sofia: exclude the municipality
  - Pernik (Перник): We will chose in гр. Перник the community кв. Рудничар because it is the biggest one
  - Plovdiv (Пловдив), in the settlement of (гр. Пловдив), we should exclude the biggest and only work with the second smallest (the smallest that has a sufficient number of HH)
  - Varna (гр. Варна) municipality of гр. Варна, there are no kindergartens.
- There must be a kindergarten at a 30 minutes walking distance from all community members
- There is the physical capacity to increase the number of children in the kindergarten by at least 15.
- There is consent by the kindergarten officials to participate

Note: 2 different communities in the list of 240 *cannot be served by the same kindergarten*; either only one must be chosen, or if the size of only one of the communities do not permit it, merging of 2 communities into one can happen. Each merging case should be validated by the TSA-WB team.

### 2- Baseline Household Survey – Winter/Spring 2014

After TSA/WB have identified the list of 240 communities using the information from the community listing survey, TSA – with support of local partners - will generate a list of 25 households (plus 5 replacements backups) in each of these 240 selected communities. Each of the 25 households will be visited by OSI, and a **45-minute questionnaire** will be administered during the visit; i.e. **to 6000 households in 240 communities altogether**. The 5 replacement households are visited only if households of the main list of 25 households have to be replaced (for example if they move out of the community).

The 45 minute baseline questionnaire will collect information on:

- Wealth of the household (e.g. income, consumption, quality of the housing, possession of durable goods)
- Educational background of parents
- Occupation of parents and time allocation
- Distance to school

- Ethnicity (self reported and reported by interviewer)
- Participation to school of all children in the household
- Perceptions of education

To offset the time cost of participating in the survey, OSI will **provide each household with a small gift, and should budget accordingly.**

## **Activities**

Please plan the following independently for both the listing exercise and the baseline:

- 1- Adapt and translate the questionnaires
- 2- Test the questionnaires
- 3- Validate sampling (Listing only)
- 4- Train and monitor enumerators
- 5- Collect and process data: interview, data entry, quality control and reporting
- 6- Post-collection quality control (e.g. back check surveys)

## **Schedule Timing**

The listing exercise should happen during the month of November-December 2013, with the database delivered at the end of December 2013, and the baseline has to happen starting in January/February 2014. The baseline data must be provided in full for the month of April 2014.

## **Deliverables**

1- A validated and translated questionnaire for community, municipality and kindergarten sections for the listing exercise, and a household questionnaire for the baseline, in English and Bulgarian, drafted in collaboration with WB & TSA (see annex). The information for the listing will only be collected at the community, municipal and kindergarten level. For the baseline, there will be 6000 households to visit.

Note: In some cases the community listing key informant interviews can be complemented with other methods/sources of information. Suggestions to improve the questionnaire and the data collection methods are welcome.

2- Provide a written feedback of notes and recommendations resulting from pretests of the questionnaires in two representative communities outside of the sample (community listing and baseline). If extensive changes are required, the pretest may have to be repeated again and a second feedback email will be requested. The pretest should be of 3 key informant per community for the community listing, and 5 households per community for the baseline.

3- A training plan, a data collection schedule, a draft progress report example, and a data entry system ready to receive the first data, with all data validation functions coded, signaling the field activities can start.

4- A regular weekly update containing the list of visited communities by geographic region (or enumerator), the data entered in the database, the back-checks, corrective measures if applied, updated schedule and any other relevant information.

5- A database of the dual entry for 10% of the questionnaires

6- A cleaned and validated database in SPSS or Stata with labels in English, with outliers verified

### **Other requirements**

- Data quality: Experienced supervisors managing the fieldwork will carry out the first level of quality control of the survey results. These staff should be experienced in survey methodologies, quality control and procedural aspects of such research projects and will work closely with the company management to monitor the performance of interviewers. The specific roles of the supervisors are to:
  - Observe and evaluate the first few interviews by each interviewer, and, if necessary, provide additional training, or replace interviewers to ensure the highest quality data collection.
  - Organize systemic data verification and validation by data collection supervisor(s) for 100% of questionnaires, on an ongoing basis during the whole data collection exercise, to identify incomplete, omitted or otherwise erroneous data. If necessary, return to respondents in the case of significant lack of response to parts of the survey or replace incomplete interviews with additional ones; Sign the questionnaire to certify completion. This should be executed concurrently to field activities, not at the end of the data collection.
  - Proceed with back-checks of a small number of questions for a random set of questionnaires, to be verified by phone or in person by the data collection supervisors or auditors
  - Also use statistical methods for checking the consistency, accuracy and quality of work for each interviewer. This requires data entry to start at the beginning of field work.
- Data entry:
  - Start data entry as early as possible after the start of data collection, and no later than two weeks after the start of data collection.
  - Design a data entry system that can a) limit the possible values, b) alert data entry operators of aberrant or extreme values caused by typos, and c) conditionally limit or alert when data entered is in conflict with other answers (for example skips) for internal coherence. Submit the data entry system to WB for approbation before the start of data collection. The data entry system has to be flexible enough to handle minor adjustments

to the questionnaire after data collection has started.

- Manually validate the complete database at the end of all data collection exercise by looking at the coherence of the data in a summary form to correct impossible answers and validate the outliers/extreme values by checking both on paper and by making phone calls when the values look suspicious. Provide a report of the verification process for each variable, tallying the method/criteria used to identify the outliers (% verified or multiple of the standard deviation), the number of outliers identified and corrected, and the number of incoherent/impossible answers identified and corrected. Report on the progress of the validation process.
- If paper based surveys, perform dual entry for at least 10% of all questionnaires. By keypunching twice the same data, it is possible to estimate the level of mistakes, and results shall be reported to WB. The dual entry should be undertaken at the end of data collection. If the level of error/match is satisfactory, data entry is also considered satisfactory. If the data is not satisfactory, corrective measures need to be proposed by the firm and approved by WB.
- Update progress on a weekly basis during data collection, data entry and data processing/cleaning to the WB team, including a report of all audits and corrective measures taken when issues arose, in an email of 2-4 paragraph of description, plus standardized progress tables. A standardized report listing entries by geographic region or by enumerator, to be approved by the WB, will be used to report the number of interviews, entries, back-checks and validation made up to date. An update of the estimated dates of completion should also be included in every report to identify as early as possible changes to the schedule.

- Reporting

- Ensure the TSA-WB team representatives are able to monitor progress at every stage. In the process of monitoring work in progress, the TSA-WB team shall have a right to request and the survey firm shall within 3 business days provide any information relating to the survey, including information about the progress of the survey, list of households interviewed, list of surveys keypunched in the database, a copy of the data currently entered in the database, etc.

The final database for delivery will contain properly labeled variables and properly labeled values. These will be in English. If certain parts of the database do not meet quality requirements, the survey firm will redo the quality check and if necessary repeat the fieldwork exercise to replace data that does not meet quality requirements.

Note: if the data is entered electronically directly by the enumerator in the fields (tablets, netbooks, smartphone), some of the above procedures may be amended.

## ***Payments***

All payments must be based on a deliverable as per WB rules:

### **Initial payment upon signing: 10%**

The remaining 90% will be divided between the cost of the community listing exercise and the baseline survey.

**For the community listing exercise**, the amount will be disbursed as follows

30% following selection of enumerators and presentation of the enumerator training plan

40% upon reporting 20% of communities have been interviewed

30% at final approbation of database in stata or SPSS, dual-entry report, report on manual verification of outliers, and last weekly report.

**For the baseline**, the amount will be disbursed as follows

30% following selection of enumerators and presentation of the enumerator training plan

40% upon reporting 20% of households have been interviewed

30% at final approbation of database in stata or SPSS, dual-entry report, report on manual verification of outliers, and last weekly report.

## ***Future activities***

Besides the listing exercise, important activities are to be prepared, subject to future terms of reference:

### **Attendance monitoring and collecting: 2014-2015 Academic year**

A data collection organization needs to preschool collect attendance 3 times during the academic year for the 240 communities' kindergartens. The objective is to collect and transcribe the attendance data books for the control treatment arms of the financial intervention, and spot-check the attendance data of the financial treatment arms.

### **Endline Survey: Spring 2015**

Close to the end of the academic year, another round of survey has to be conducted for the 6,000 households. This questionnaire will be slightly longer, around 60-90 minutes; it will include the following sections:

- A cognitive assessment of the participating child
- A non-cognitive assessment of the participating child



- Participation to school of the participating child and all his/her siblings
- Perceptions of education from the parents
- Occupation of parents and timetable
- Wealth of the household (income, consumption, quality of the housing, possession of durable goods)

Also a qualitative interview is to be setup.

### ***Confidentiality:***

Survey Firm will at all stages protect the confidentiality of respondents participating in the survey. None of the intermediate or final outputs of the survey will bear the names of participating individuals. All completed questionnaires will either be delivered to World Bank Group in Washington, DC, or destroyed based on the written decision of the World Bank Group task manager. The survey data and all related analysis are the property of the World Bank Group, and should be used for other purposes only with the written consent of the World Bank Group task manager.

### ***Qualifications of the data collection organization:***

A reputable survey firm demonstrating the following qualifications:

- Established track record and demonstrated experience in sample design, survey methodology and survey implementation.
- Experience in conducting household surveys, and the capacity to undertake data entry.
- Capacity to train and mobilize qualified surveyors and data entry personnel. The survey firm must have the logistical capacity to carry out the survey within the time frame of the study.
- Ability to evaluate the effectiveness of the survey instruments and methodology, and to revise as needed to achieve the best results.
- Proven ability to plan, manage and execute complex projects and to ensure high quality delivery of results.
- Ability to adapt to unexpected work program needs and changing work requirements.
- Knowledge of the World Bank's fiduciary and procurement policies, rules and requirements is preferable.
- Excellent written and oral communication skills in English and Bulgarian
- Demonstrated ability to handle sensitive situations.
- High ethical standards and deep sense of integrity and commitment.

